

POOR LEGIBILITY

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Letter of Transmittal

To: Los Angeles Regional Water Quality Control Board
107 South Broadway, Room 1017
Los Angeles, CA 90012-4586

Date: 1/6/88 Job No.: 872505

Attention: David Bochorowski

Subject: Pacific Aeronautic Corporation

We are sending you:

Attached or Under separate cover via _____

the following items:

Plans Prints Specifications Samples Shop drawings
 Copy of letter Change order as described above

Copies Date No. Description

1 1/6/89 Groundwater Monitoring Program for
Pacific Aeronautic Corporation Jet
Fuel Spill Site

These are transmitted as checked below:

For information and coordination For review and comment Resubmit _____ copies for review
 For approval Returned after loan to us Submit _____ copies for distribution
 As requested _____ Return _____ corrected prints

Remarks:

At the request of Christopher Andrews of Aeromach Corporation, we are transmitting the results of our recent sampling of the two wells located at PAC's jet engine test facility. As we have in the past, we will notify you prior to the next scheduled sampling in June, 1989.

Copies to: Eugene Fox, Pacific Aeronautic Corporation

Kennedy/Jenks/Chilton

If enclosures are not as noted, kindly notify us at once.

By: Nauf M. Ferrier,
Project Manager

Kennedy/Jenks/Chilton

6 January 1989

Consulting Engineers

3336 Bradshaw Road Suite 320
Sacramento, California 95827
916-362-3251

Mr. Christopher Andrews
Vice President, Operations
Airwork Corporation
Millville, New Jersey 08322

Subject: Groundwater Monitoring Program for Pacific Airmotive
Corporation Jet Fuel Spill Site
Burbank, CA
(K/J/C 872505.01)

Dear Mr. Andrews:

In accordance with our Agreement dated 1 May 1987, we have completed the fourth sampling of groundwater from monitoring wells MW-1 and MW-2 at the Pacific Airmotive Corporation (PAC) jet engine test facility in Burbank, CA. These wells were sampled as part of the semi-annual groundwater monitoring program that is being conducted to comply with closure requirements for remediation of a jet fuel pipeline rupture.

Remedial actions completed at the site to date include excavation of soil containing jet fuel to a depth of 30 feet; replacement of the soil with compacted, clean fill, and placement of a new asphalt surface over the site. A two-year groundwater monitoring program was undertaken by PAC at the request of the Regional Water Quality Control Board to evaluate possible migration of jet fuel remaining in soils beneath the site.

GROUNDWATER ANALYSES AND RESULTS

Groundwater samples were analyzed for petroleum hydrocarbons by a gas chromatographic scan obtained with a flame ionization detector using commercial gasoline, diesel fuel and jet fuel as standards. The samples were also analyzed for volatile organic chemicals (VOCs) by EPA Method 8240 utilizing gas chromatography/mass spectroscopy to evaluate disposal options for the purged water.

The results of laboratory analysis of semi-annual samples collected from July 1987 to the present are summarized in Table 1. Copies of laboratory reports are presented in Attachment A to this letter. The locations of the monitoring wells are shown on Figure 1.

The results of the recent groundwater sampling for jet fuel are consistent with previous site sampling. Jet fuel has not been detected in groundwater samples collected during the past eighteen months.

The results of groundwater analysis for VOCs are also consistent with previous sampling. VOCs were detected in samples from both of the monitoring wells, confirming the results of previous analyses.

Mr. Christopher Andrews
Airwork Corporation
6 January 1989
Page 2

As indicated in our letter dated 23 July 1987 to Airwork Corporation, according to PAC operations personnel there have been no discharges of chlorinated hydrocarbons at the site and the VOCs detected in MW-1 and MW-2 are likely to have originated from offsite sources.

No diesel fuel was detected above the detection limits of 0.05 mg/L in the recent sampling. Since sampling was initiated, diesel fuel has only been detected in one sample (December 1987) at a concentration of 0.22 mg/L in MW-1. However, during the subsequent two sampling events diesel has not been detected in either monitoring well.

RECOMMENDATIONS

Semi-annual groundwater monitoring should continue for the two-year period in accordance with our 2 April 1987 work plan. The two-year groundwater monitoring program will end with the next scheduled sampling in June, 1989.

If you have any questions or wish to discuss our findings in greater detail, please do not hesitate to call us.

Very truly yours,

KENNEDY/JENKS/CHILTON

Noel M. Lerner

Noel M. Lerner
Project Manager

NML:ap

Attachments: Table 1
Figure 1
Attachment A - Laboratory Analysis Reports
for December 1988 Analyses

cc: Mr. Eugene Fox, Pacific Airmotive Corporation

TABLE 1

SUMMARY OF GROUNDWATER MONITORING PROGRAM
LABORATORY ANALYSIS RESULTS
PACIFIC AIRMOTIVE CORPORATION
BURBANK, CALIFORNIA
(K/J/C 872505.01)

| Sample Source ^a | Chemical ^b | Concentration Detected (6/87) | Concentration Detected (12/87) | Concentration Detected (6/88) | Concentration Detected 12/88 |
|------------------------------|--|-------------------------------|--------------------------------|-------------------------------|------------------------------|
| MW-1 | Gasoline | <0.16 mg/L ^c | <0.05 mg/L | <0.05 mg/L | <0.05 mg/L |
| | Diesel | <0.24 mg/L | <0.075 mg/L | <0.085 mg/L | <0.05 mg/L |
| | Jet Fuel | <0.24 mg/L | <0.125 mg/L | <0.15 mg/L | <0.10 mg/L |
| | 1,1-Dichloroethylene | NA | <5 ug/L | 5 ug/L | <5 ug/L |
| | Trichloroethylene | NA | 24 ug/L | 31 ug/L | 12 ug/L |
| | Tetrachloroethylene | NA | 67 ug/L | 160 ug/L | 75 ug/L |
| | 1,1,2 - Trichloro- 1,2,2-Trifluoro- ethane | NA | <5 ug/L | 19 ug/L | <5 mg/L |
| | Gasoline | <0.16 mg/L | <0.05 mg/L | <0.05 mg/L | <0.05 mg/L |
| | Diesel | <0.24 mg/L | 0.22 mg/L | <0.085 mg/L | <0.05 mg/L |
| | Jet Fuel | <0.24 mg/L | <0.125 mg/L | <0.15 mg/L | <0.1 mg/L |
| MW-2 | 1,1-Dichloroethylene | NA | 5 ug/L | 5 ug/L | <5 ug/L |
| | Trichloroethylene | NA | 41 ug/L | 33 ug/L | 15 ug/L |
| | Tetrachloroethylene | NA | 190 ug/L | 200 ug/L | 130 ug/L |
| | 1,1,2 - Trichloro- 1,2,2 - Trifluoro- ethane | NA | <5 ug/L | 20 ug/L | <5 mg/L |
| | Chloroform | 6 ug/L | NA | NA | NA |
| | Trichloroethylene | 32 ug/L | NA | NA | NA |
| | Tetrachloroethylene | 130 ug/L | NA | NA | NA |
| | | | | | |
| | | | | | |
| | | | | | |
| MW-1 and MW-2, Composited | | | | | |

TABLE 1
SUMMARY OF GROUNDWATER MONITORING PROGRAM
LABORATORY ANALYSIS RESULTS
PACIFIC AIRMOTIVE CORPORATION
BURBANK, CALIFORNIA
(K/J/C 872505.01)

(Continued)

- a. Refer to Figure 1 for location of monitoring wells.
- b. ^oPetroleum hydrocarbons by gas chromatography scan utilizing a flame ionization detector.
 - Volatile organic compounds (VOCs) analyses performed by EPA Method 8240 utilizing gas chromatography/mass spectroscopy.

NA - Not Analyzed

< - Concentration is below the detection limits of the analysis method.

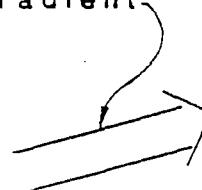
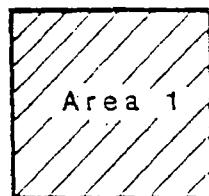
scale in feet
0 10 20



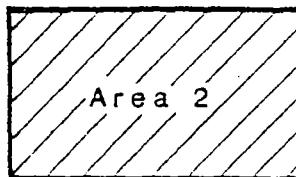
Property Line

Control
Room

Approximate Direction
of Unconfined Aquifer
Hydraulic Gradient



MW-2



Shed

Test Cell No. 4

Notes:

1. Area 1, Excavated to a Depth of 25 feet in 1985.
2. Area 2, Excavated to a Depth of 30 feet in 1985.
3. Hydraulic Gradient from "Groundwater Quality Management Plan San Fernando Valley Basin" (Los Angeles Department of Water and Power, July, 1983).
4. All Locations are Approximate.

Kennedy/Jenks/Chitco

Pacific Airmotive Corporation,
Burbank, C.

Locations of Groundwater
Monitoring Wells

KJJC 872505.C
January 1988

Kennedy/Jenks/Chilton

Attachment to Kennedy/Jenks/Chilton's
letter dated 6 January 1989 to Airwork
Corporation

ATTACHMENT A

**LABORATORY ANALYSIS REPORTS FOR
DECEMBER 1988 ANALYSES**

GC/MS Priority Pollutant Analysis

Kennedy/Jenks/Chilton, Laboratory Division
 657 Howard Street
 San Francisco, CA 94105
 415-362-6065

For Kennedy/Jenks/Chilton
 Attention Noel M. Lerner
 Address 3336 Bradshaw Road, Suite 320
 Sacramento, CA 95827

Quality Control Page
 Received 12/16/88
 Reported 12/20/88
 (K/J/C 872505.01)

Lab. No. 888996

Source Sample I.D.: Water- Travel Blank
 Depth: -
 Pacific Airmotive Corp.

Date Collected 12/15/88 Date Analyzed: 12/16/88

Time Collected -

Collected by K/J/C

| Volatile | PRIORITY POLLUTANT COMPOUNDS | | Volatile | ug/L (ppb) | |
|----------------------------------|------------------------------|------|-----------------------------|------------|------|
| | Det. | Lim. | | Det. | Lim. |
| chloromethane | <10 | 10 | bromodichloromethane | <5 | 5 |
| bromomethane | <10 | 10 | 1,2-dichloropropane | <5 | 5 |
| vinyl chloride | <10 | 10 | trans-1,3-dichloropropylene | <5 | 5 |
| chloroethane | <10 | 10 | trichloroethylene | <5 | 5 |
| methylene chloride | <5 | 5 | benzene | <5 | 5 |
| acrolein | <30 | 30 | dibromochloromethane | <5 | 5 |
| acrylonitrile | <10 | 10 | cis-1,3-dichloropropylene | <5 | 5 |
| trichlorofluoromethane | <5 | 5 | 1,1,2-trichloroethane | <5 | 5 |
| 1,1-dichloroethylene | <5 | 5 | 2-chloroethylvinyl ether | <5 | 5 |
| 1,1-dichloroethane | <5 | 5 | bromoform | <5 | 5 |
| 1,2-dichloroethylene | <5 | 5 | tetrachloroethylene | <5 | 5 |
| chloroform | <5 | 5 | 1,1,2,2-tetrachloroethane | <5 | 5 |
| 1,2-dichloroethane | <5 | 5 | toluene | <5 | 5 |
| 1,1,1-trichloroethane | <5 | 5 | chlorobenzene | <5 | 5 |
| carbon tetrachloride | <5 | 5 | ethylbenzene | <5 | 5 |
| NON-PRIORITY POLLUTANT COMPOUNDS | | | | | |
| acetonitrile | <30 | 30 | vinyl acetate | <10 | 10 |
| acetone | <10 | 10 | 4-methyl-2-pentanone | <10 | 10 |
| carbon disulfide | <5 | 5 | 2-hexanone | <10 | 10 |
| 1,1,2-Trichloro- | | | styrene | <5 | 5 |
| 1,2,2-trifluoroethane | <5 | 5 | xylenes | <5 | 5 |
| 2-butanone | <10 | 10 | | | |

Comments: Analysis by U.S. EPA Method 8240, reported in micrograms per liter.

Analyst DC, WV

Manager

Bennett R. Smith

GC/MS Priority Pollutant Analysis

Kennedy/Jenks/Chilton, Laboratory Division
 657 Howard Street
 San Francisco, CA 94105
 415-362-6065

For Kennedy/Jenks/Chilton
 Attention Noel M. Lerner
 Address 3336 Bradshaw Road, Suite 320
 Sacramento, CA 95827

Received 12/16/88
 Reported 12/20/88
 (K/J/C 872505.01)

Lab. No. 888997

Source Sample I.D.: Water- MW1-4
 Depth: -
 Pacific Airmotive Corp.

Date Collected 12/15/88 Date Analyzed: 12/16/88

Time Collected 0935

Collected by K/J/C

PRIORITY POLLUTANT COMPOUNDS

| Volatiles | ug/L (ppb) | | Volatiles | ug/L (ppb) | |
|------------------------|------------|------|-----------------------------|------------|------|
| | Det. | Lim. | | Det. | Lim. |
| chloromethane | <10 | 10 | bromodichloromethane | <5 | 5 |
| bromomethane | <10 | 10 | 1,2-dichloropropane | <5 | 5 |
| vinyl chloride | <10 | 10 | trans-1,3-dichloropropylene | <5 | 5 |
| chloroethane | <10 | 10 | trichloroethylene | 12 | 5 |
| methylene chloride | <5 | 5 | benzene | <5 | 5 |
| acrolein | <30 | 30 | dibromochloromethane | <5 | 5 |
| acrylonitrile | <10 | 10 | cis-1,3-dichloropropylene | <5 | 5 |
| trichlorofluoromethane | <5 | 5 | 1,1,2-trichloroethane | <5 | 5 |
| 1,1-dichloroethylene | <5 | 5 | 2-chloroethylvinyl ether | <5 | 5 |
| 1,1-dichloroethane | <5 | 5 | bromoform | <5 | 5 |
| 1,2-dichloroethylene | <5 | 5 | tetrachloroethylene | 75 | 5 |
| chloroform | <5 | 5 | 1,1,2,2-tetrachloroethane | <5 | 5 |
| 1,2-dichloroethane | <5 | 5 | toluene | <5 | 5 |
| 1,1,1-trichloroethane | <5 | 5 | chlorobenzene | <5 | 5 |
| carbon tetrachloride | <5 | 5 | ethylbenzene | <5 | 5 |

NON-PRIORITY POLLUTANT COMPOUNDS

| | | | | | |
|-----------------------|-----|----|----------------------|-----|----|
| acetonitrile | <30 | 30 | vinyl acetate | <10 | 10 |
| acetone | <10 | 10 | 4-methyl-2-pentanone | <10 | 10 |
| carbon disulfide | <5 | 5 | 2-hexanone | <10 | 10 |
| 1,1,2-Trichloro- | | | styrene | <5 | 5 |
| 1,2,2-trifluoroethane | <5 | 5 | xylenes | <5 | 5 |
| 2-butanone | <10 | 10 | | | |

Comments: Analysis by U.S. EPA Method 8240, reported in micrograms per liter.

Analyst DC, WW

Manager *Robert R. Lerner*

GC/MS Priority Pollutant Analysis

Kennedy/Jenks/Chilton, Laboratory Division

657 Howard Street
San Francisco, CA 94105
415-362-6065

For Kennedy/Jenks/Chilton
 Attention Noel M. Lerner
 Address 3336 Bradshaw Road, Suite 320
 Sacramento, CA 95327

Received 12/16/88
 Reported 12/20/88
 (K/J/C 872505.01)

Lab. No. 888998

Source Sample I.D.: Water- MW2-4
 Depth: -
 Pacific Airmotive Corp.

Date Collected 12/15/88 Date Analyzed: 12/16/88

Time Collected 1130

Collected by K/J/C

| Volatile | PRIORITY POLLUTANT COMPOUNDS | | | ug/L (ppb) | Det. Lim. |
|----------------------------------|------------------------------|----------|-----------------------------|------------|-----------|
| | ug/L (ppb) | Volatile | ug/L (ppb) | | |
| chloromethane | <10 | 10 | bromodichloromethane | <5 | 5 |
| bromomethane | <10 | 10 | 1,2-dichloropropane | <5 | 5 |
| vinyl chloride | <10 | 10 | trans-1,3-dichloropropylene | <5 | 5 |
| chloroethane | <10 | 10 | trichloroethylene | 15 | 5 |
| methylene chloride | <5 | 5 | benzene | <5 | 5 |
| acrolein | <30 | 30 | dibromochloromethane | <5 | 5 |
| acrylonitrile | <10 | 10 | cis-1,3-dichloropropylene | <5 | 5 |
| trichlorofluoromethane | <5 | 5 | 1,1,2-trichloroethane | <5 | 5 |
| 1,1-dichloroethylene | <5 | 5 | 2-chloroethylvinyl ether | <5 | 5 |
| 1,1-dichloroethane | <5 | 5 | bromoform | <5 | 5 |
| 1,2-dichloroethylene | <5 | 5 | tetrachloroethylene | 130 | 5 |
| chloroform | <5 | 5 | 1,1,2,2-tetrachloroethane | <5 | 5 |
| 1,2-dichloroethane | <5 | 5 | toluene | 6 | 5 |
| 1,1,1-trichloroethane | <5 | 5 | chlorobenzene | <5 | 5 |
| carbon tetrachloride | <5 | 5 | ethylbenzene | <5 | 5 |
| NON-PRIORITY POLLUTANT COMPOUNDS | | | | | |
| acetonitrile | <30 | 30 | vinyl acetate | <10 | 10 |
| acetone | <10 | 10 | 4-methyl-2-pentanone | <10 | 10 |
| carbon disulfide | <5 | 5 | 2-hexanone | <10 | 10 |
| 1,1,2-Trichloro- | | | styrene | <5 | 5 |
| 1,2,2-trifluoroethane | <5 | 5 | xylenes | <5 | 5 |
| 2-butanone | <10 | 10 | | | |

Comments: Analysis by U.S. EPA Method 8240, reported in micrograms per liter.

Analyst DC, WW

Manager *Reverett R. Smith*

This report applies only to the sample investigated and is not necessarily indicative of the quality of apparently identical or similar samples. The liability of the laboratory is limited to the amount paid for the report by the issuee. The issuee assumes all liability for the further distribution of this report or its contents and by making such distribution agrees to hold the laboratory harmless against all claims of persons so informed of the contents hereof.

GC/MS Priority Pollutant Analysis

Kennedy/Jenks/Chilton, Laboratory Division

657 Howard Street
San Francisco, CA 94105
415-362-6065

For Kennedy/Jenks/Chilton
 Attention Noel M. Lerner
 Address 3336 Bradshaw Road, Suite 320
 Sacramento, CA 95827

Received 12/16/88
 Reported 12/20/88
 (K/J/C 872505.01)

Lab. No. 888999

Source Sample I.D.: Water- DW12-2
 Depth: -
 Pacific Airmotive Corp.

Date Collected 12/15/88 Date Analyzed: 12/16/88

Time Collected -

Collected by K/J/C

| Volatile | PRIORITY POLLUTANT COMPOUNDS | | | ug/L (ppb) | Det. Lim. |
|------------------------|------------------------------|----------|-----------------------------|------------|-----------|
| | ug/L (ppb) | Volatile | ug/L (ppb) | | |
| chloromethane | <10 | 10 | bromodichloromethane | <5 | 5 |
| bromomethane | <10 | 10 | 1,2-dichloropropane | <5 | 5 |
| vinyl chloride | <10 | 10 | trans-1,3-dichloropropylene | <5 | 5 |
| chloroethane | <10 | 10 | trichloroethylene | 14 | 5 |
| methylene chloride | <5 | 5 | benzene | <5 | 5 |
| acrolein | <30 | 30 | dibromochloromethane | <5 | 5 |
| acrylonitrile | <10 | 10 | cis-1,3-dichloropropylene | <5 | 5 |
| trichlorofluoromethane | <5 | 5 | 1,1,2-trichloroethane | <5 | 5 |
| 1,1-dichloroethylene | <5 | 5 | 2-chloroethylvinyl ether | <5 | 5 |
| 1,1-dichloroethane | <5 | 5 | bromoform | <5 | 5 |
| 1,2-dichloroethylene | <5 | 5 | tetrachloroethylene | 110 | 5 |
| chloroform | <5 | 5 | 1,1,2,2-tetrachloroethane | <5 | 5 |
| 1,2-dichloroethane | <5 | 5 | toluene | <5 | 5 |
| 1,1,1-trichloroethane | <5 | 5 | chlorobenzene | <5 | 5 |
| carbon tetrachloride | <5 | 5 | ethylbenzene | <5 | 5 |

NON-PRIORITY POLLUTANT COMPOUNDS

| | | | | | |
|-----------------------|-----|----|----------------------|-----|----|
| acetonitrile | <30 | 30 | vinyl acetate | <10 | 10 |
| acetone | <10 | 10 | 4-methyl-2-pentanone | <10 | 10 |
| carbon disulfide | <5 | 5 | 2-hexanone | <10 | 10 |
| 1,1,2-Trichloro- | | | styrene | <5 | 5 |
| 1,2,2-trifluoroethane | <5 | 5 | xylenes | <5 | 5 |
| 2-butanone | <10 | 10 | | | |

Comments: Analysis by U.S. EPA Method 8240, reported in micrograms per liter.

Analyst DC, WW

Manager Bennett & Smith

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GC/MS Priority Pollutant Analysis

Kennedy/Jenks/Chilton, Laboratory Division

657 Howard Street
 San Francisco, CA 94107
 415-362-6065

For Kennedy/Jenks/Chilton
 Attention Noel M. Lerner
 Address 3336 Bradshaw Road, Suite 320
 Sacramento, CA 95827

Quality Control Page
 Received 12/16/88
 Reported 12/20/88
 (K/J/C 872505.01)

Lab. No. 888900

Source Sample I.D.: Water- Field Blank
 Depth: -
 Pacific Airmotive Corp.

Date Collected 12/15/88 Date Analyzed: 12/16/88

Time Collected 1130

Collected by K/J/C

PRIORITY POLLUTANT COMPOUNDS

| Volatiles | ug/L (ppb) | Volatiles | ug/L (ppb) | | |
|------------------------|------------|-----------|-----------------------------|----|---|
| | Det. Lim. | | Det. Lim. | | |
| chloromethane | <10 | 10 | bromodichloromethane | <5 | 5 |
| bromomethane | <10 | 10 | 1,2-dichloropropane | <5 | 5 |
| vinyl chloride | <10 | 10 | trans-1,3-dichloropropylene | <5 | 5 |
| chloroethane | <10 | 10 | trichloroethylene | <5 | 5 |
| methylene chloride | <5 | 5 | benzene | <5 | 5 |
| acrolein | <30 | 30 | dibromochloromethane | <5 | 5 |
| acrylonitrile | <10 | 10 | cis-1,3-dichloropropylene | <5 | 5 |
| trichlorofluoromethane | <5 | 5 | 1,1,2-trichloroethane | <5 | 5 |
| 1,1-dichloroethylene | <5 | 5 | 2-chloroethylvinyl ether | <5 | 5 |
| 1,1-dichloroethane | <5 | 5 | bromoform | <5 | 5 |
| 1,2-dichloroethylene | <5 | 5 | tetrachloroethylene | <5 | 5 |
| chloroform | <5 | 5 | 1,1,2,2-tetrachloroethane | <5 | 5 |
| 1,2-dichloroethane | <5 | 5 | toluene | <5 | 5 |
| 1,1,1-trichloroethane | <5 | 5 | chlorobenzene | <5 | 5 |
| carbon tetrachloride | <5 | 5 | ethylbenzene | <5 | 5 |

NON-PRIORITY POLLUTANT COMPOUNDS

| | | | | | |
|-----------------------|-----|----|----------------------|-----|----|
| acetonitrile | <30 | 30 | vinyl acetate | <10 | 10 |
| acetone | <10 | 10 | 4-methyl-2-pentanone | <10 | 10 |
| carbon disulfide | <5 | 5 | 2-hexanone | <10 | 10 |
| 1,1,2-Trichloro- | | | styrene | <5 | 5 |
| 1,2,2-trifluoroethane | <5 | 5 | xylenes | <5 | 5 |
| 2-butanone | <10 | 10 | | | |

Comments: Analysis by U.S. EPA Method 8240, reported in micrograms per liter.

Analyst DC, WW

Manager Bennett R. Smith

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GC/MS Priority Pollutant Analysis

Kennedy/Jenks/Chilton, Laboratory Division
 657 Howard Street
 San Francisco, CA 94105
 415-362-6065

For Kennedy/Jenks/Chilton
 Attention Noel M. Lerner
 Address 3336 Bradshaw Road, Suite 320
 Sacramento, CA 95827

Quality Control Page
 Received -
 Reported 12/20/88
 (K/J/C 872505.01)

Lab. No. Method Blank

Source Sample I.D.: Reagent Water

Date Collected - Date Analyzed: 12/16/88

Time Collected -

Collected by K/J/C

| Volatile | PRIORITY POLLUTANT COMPOUNDS | | ug/L (ppb) | Volatile | ug/L (ppb) | Det. Lim. |
|----------------------------------|------------------------------|------|-----------------------------|----------|------------|-----------|
| | Det. | Lim. | | | | |
| chloromethane | <10 | 10 | bromodichloromethane | <5 | 5 | |
| bromomethane | <10 | 10 | 1,2-dichloropropane | <5 | 5 | |
| vinyl chloride | <10 | 10 | trans-1,3-dichloropropylene | <5 | 5 | |
| chloroethane | <10 | 10 | trichloroethylene | <5 | 5 | |
| methylene chloride | <5 | 5 | benzene | <5 | 5 | |
| acrolein | <30 | 30 | dibromochloromethane | <5 | 5 | |
| acrylonitrile | <10 | 10 | cis-1,3-dichloropropylene | <5 | 5 | |
| trichlorofluoromethane | <5 | 5 | 1,1,2-trichloroethane | <5 | 5 | |
| 1,1-dichloroethylene | <5 | 5 | 2-chloroethylvinyl ether | <5 | 5 | |
| 1,1-dichloroethane | <5 | 5 | bromoform | <5 | 5 | |
| 1,2-dichloroethylene | <5 | 5 | tetrachloroethylene | <5 | 5 | |
| chloroform | <5 | 5 | 1,1,2,2-tetrachloroethane | <5 | 5 | |
| 1,2-dichloroethane | <5 | 5 | toluene | <5 | 5 | |
| 1,1,1-trichloroethane | <5 | 5 | chlorobenzene | <5 | 5 | |
| carbon tetrachloride | <5 | 5 | ethylbenzene | <5 | 5 | |
| NON-PRIORITY POLLUTANT COMPOUNDS | | | | | | |
| acetonitrile | <30 | 30 | vinyl acetate | <10 | 10 | |
| acetone | <10 | 10 | 4-methyl-2-pentanone | <10 | 10 | |
| carbon disulfide | <5 | 5 | 2-hexanone | <10 | 10 | |
| 1,1,2-Trichloro- | | | styrene | <5 | 5 | |
| 1,2,2-trifluoroethane | <5 | 5 | xylenes | <5 | 5 | |
| 2-butanone | <10 | 10 | | | | |

Comments: Analysis by U.S. EPA Method 8240, reported in micrograms per liter.

Analyst DC, WW

Manager *John R. Dunn*

This report applies only to the sample investigated and is not necessarily indicative of the quality of apparently identical or similar samples. The liability of the laboratory is limited to the amount paid for the report by the issuee. The issuee assumes all liability for the further distribution of this report or its contents and by making such distribution agrees to hold the laboratory harmless against all claims of persons so informed of the contents hereof.

GC/MS Volatiles
Surrogate Standard Recovery Report

Kennedy/Jenks/Chilton

Laboratory Division
657 Howard Street
San Francisco, California 94105
415-362 6065

For Kennedy/Jenks/Chilton
Attention Noel M. Lerner
Address 3336 Bradshaw Road, Suite 320
Sacramento, CA 95827

Received -
Reported 12/20/88
Quality Control Page
(K/J/C 872505.01)

| Sample Identification | | Percent Recoveries | | |
|-----------------------|-------|-----------------------|------------|----------------------|
| Lab No. | Type | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
| Method Blank | Water | 85 | 93 | 89 |
| 888996 | Water | 96 | 100 | 92 |
| 888900 | Water | 104 | 106 | 102 |
| 888997 | Water | 108 | 108 | 99 |
| 888998 | Water | 101 | 104 | 98 |
| 888999 | Water | 103 | 104 | 99 |

| Acceptable Recoveries: | Water | Soil |
|------------------------|--------|--------|
| 1,2-Dichloroethane-d4 | 76-114 | 70-121 |
| Toluene-d8 | 88-110 | 81-117 |
| 4-Bromofluorobenzene | 86-115 | 74-121 |

Analyst DC, WW

Manager

Lettie R. Smith

Kennedy/Jenks/Chilton

Laboratory Division

657 Howard Street
San Francisco, California 94105
415-362-6065**Analysis Report**

| | | | |
|-----------|---|-------------------|----------|
| For | Kennedy/Jenks/Chilton | Received | 12/16/88 |
| Attention | Noel M. Lerner | Reported | 12/20/88 |
| Address | 3336 Bradshaw Road, Suite 320 Sacramento, CA 95827 | (K/J/C 872505.01) | |

| | |
|----------|--------|
| Lab. No. | 888997 |
|----------|--------|

| | |
|-------------------------|---------------------------|
| Source | Sample I.D.: Water- MWI-4 |
| Pacific Airmotive Corp. | |

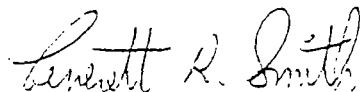
| | | |
|----------------|----------|--------------------------|
| Date Collected | 12/15/88 | Date Extracted: 12/16/88 |
| Time Collected | 0935 | Date Analyzed: 12/16/88 |
| Collected by | K/J/C | |

| Analysis | Units | Analytical Results | Det. Limit |
|--|-------|--------------------|------------|
| Petroleum Hydrocarbons (as gasoline) | mg/L | <0.05 | 0.05 |
| Petroleum Hydrocarbons (as diesel fuel) | mg/L | <0.05 | 0.05 |
| Petroleum Hydrocarbons (as jet fuel) | mg/L | <0.1 | 0.1 |

Comments: Analysis of hexane extract by capillary gas chromatography, using flame ionization detection. Commercial hydrocarbons used as comparison standards. Results reported in milligrams per liter.

Analyst _____ PG

Manager _____



Kennedy/Jenks/Chilton

Laboratory Division

657 Howard Street
San Francisco, California 94105
415-362-5065**Analysis Report**

| | | | |
|-----------|---|-------------------|----------|
| For | Kennedy/Jenks/Chilton | Received | 12/16/88 |
| Attention | Noel M. Lerner | Reported | 12/20/88 |
| Address | 3336 Bradshaw Road, Suite 320 Sacramento, CA 95827 | (K/J/C 872505.01) | |

| | |
|----------|--------|
| Lab. No. | 888998 |
|----------|--------|

| | |
|--------|---------------------------|
| Source | Sample I.D.: Mater- MW2-4 |
|--------|---------------------------|

Pacific Airmotive Corp.

| | | |
|----------------|----------|---|
| Date Collected | 12/15/88 | Date Extracted: 12/16/88 Date Analyzed: 12/16/88 |
|----------------|----------|---|

| | |
|----------------|------|
| Time Collected | 1130 |
|----------------|------|

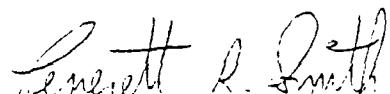
| | |
|--------------|-------|
| Collected by | K/J/C |
|--------------|-------|

| Analysis | Units | Analytical Results | Det. Limit |
|--|-------|--------------------|------------|
| Petroleum Hydrocarbons (as gasoline) | mg/L | <0.05 | 0.05 |
| Petroleum Hydrocarbons (as diesel fuel) | mg/L | <0.05 | 0.05 |
| Petroleum Hydrocarbons (as jet fuel) | mg/L | <0.1 | 0.1 |

Comments: Analysis of hexane extract by capillary gas chromatography, using flame ionization detection. Commercial hydrocarbons used as comparison standards. Results reported in milligrams per liter.

Analyst PG

Manager



Analysis Report**Kennedy/Jenks/Chilton**

Laboratory Division

657 Howard Street
San Francisco, California 94105
415-362-6065

| | | | |
|-----------|---|----------------------|-------------------|
| For | Kennedy/Jenks/Chilton | Received | 12/16/88 |
| Attention | Noel M. Lerner | Reported | 12/20/88 |
| Address | 3336 Bradshaw Road, Suite 320 Sacramento, CA 95827 | Quality Control Page | (K/J/C 872505.01) |

| | |
|----------|--------|
| Lab. No. | 888998 |
|----------|--------|

| | |
|--------|---------------------------|
| Source | Sample I.D.: Water- MW2-4 |
|--------|---------------------------|

Pacific Airmotive Corp.

| | | |
|----------------|----------|--------------------------|
| Date Collected | 12/15/88 | Date Extracted: 12/16/88 |
| | | Date Analyzed: 12/16/88 |

| | |
|----------------|------|
| Time Collected | 1130 |
|----------------|------|

| | |
|--------------|-------|
| Collected by | K/J/C |
|--------------|-------|

| Analysis | Units | Replicate | Analytical Results | Det. Limit |
|--|-------|-----------|---------------------------|------------|
| Petroleum Hydrocarbons (as gasoline) | mg/L | <0.05 | <0.05 Spike recovery 93% | 0.05 |
| Petroleum Hydrocarbons (as diesel fuel) | mg/L | <0.05 | <0.05 Spike recovery 101% | 0.05 |
| Petroleum Hydrocarbons (as jet fuel) | mg/L | <0.1 | <0.1 | 0.1 |

Comments: Analysis of hexane extract by capillary gas chromatography, using flame ionization detection. Commercial hydrocarbons used as comparison standards. Results reported in milligrams per liter.

Analyst PG

Manager Lewis R. Smith

Analysis Report**Kennedy/Jenks/Chilton**

Laboratory Division

657 Howard Street
San Francisco, California 94105
415-362-6065

For Kennedy/Jenks/Chilton
Attention Noel M. Lerner
Address 3336 Bradshaw Road, Suite 320
Sacramento, CA 95827

Received -
Reported 12/20/88
Quality Control Page
(K/J/C 872505.01)

Lab. No. Method Blank

Source Sample I.D.: Reagent Water

Date Collected - Date Analyzed: 12/16/88

Time Collected -

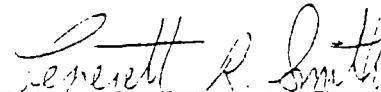
Collected by K/J/C

| Analysis | Units | Analytical Results | Det. Limit |
|--|-------|--------------------|------------|
| Petroleum Hydrocarbons (as gasoline) | mg/L | <0.05 | 0.05 |
| Petroleum Hydrocarbons (as diesel fuel) | mg/L | <0.05 | 0.05 |
| Petroleum Hydrocarbons (as jet fuel) | mg/L | <0.1 | 0.1 |

Comments: Analysis of hexane extract by capillary gas chromatography, using flame ionization detection. Commercial hydrocarbons used as comparison standards. Results reported in milligrams per liter.

Analyst PG

Manager



California State Department Of Health Services
Southern California Laboratory

Analysis Request Form

| Name of Sampler: <u>MARK</u> | Phone No: (ATSS) <u>6441-5473</u> <u>(213) - 620-5473</u> | | | |
|--|--|----------------|-----------------|---|
| Sampler Employed By: R.W.Q.C. Board No. : <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 | | | | |
| Sample Source: <u>PACIFIC INDUSTRIAL (PAC)</u> | | | | |
| Date Collected : <u>12/15/88</u> | Analysis Task No. <u>126-03</u> | | | |
| Sample Type : <input type="checkbox"/> Drinking water : <input checked="" type="checkbox"/> Ground water <input type="checkbox"/> Surface water <input type="checkbox"/> Waste water : Chlorinated : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Solid sample : <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> Sediment <input type="checkbox"/> Other | | | | |
| Use your own Bottle ID. No. for each bottle. | | | | |
| For Lab use Log Number | Bottle ID. No. | Sampling Point | Time collected | Type of Analysis required (Be Specific) |
| <u>812-3361</u> | <u>PAC 1W-1</u> | <u>11:46 A</u> | <u>VOC</u> | |
| <u>812-3362</u> | <u>PAC MW-1</u> | <u>11:46 A</u> | <u>TPH</u> | |
| <u>812-3363</u> | <u>PAC MW-2</u> | <u>11:50 A</u> | <u>VOC</u> | |
| <u>812-3364</u> | <u>PAC 1W-2</u> | <u>11:50 A</u> | <u>TPH</u> | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Warning or Special Instruction on Samples : | | | | |
| Seals: <input type="checkbox"/> Intact <input type="checkbox"/> None <input type="checkbox"/> Broken | | | Date | Time |
| Samples Relinquished by | | | | |
| Samples Received by | | | | |
| Received for Lab by | | | <u>12/15/88</u> | <u>12/15</u> |

(For Lab use only) Total cost for Lab analyses : \$ 800

CALIFORNIA STATE DEPARTMENT OF HEALTH SERVICES
SOUTHERN CALIFORNIA LABORATORY - SWQIS Lab ID No. 5091

Laboratory Analytical Report

DATE REPORTED : 12/27/88

DATE SAMPLED : 12/15/88

SAMPLER : Hostak

| Lab ID. Number | CONSTITUENT | EPA METHOD | STORED CODE | UNITS | ANALYST | REPORTING LIMIT |
|-------------------|-------------|---------------|----------------|-------|---------|--------------------|
| 812-3362 | TPH | | 418.1 | mg/L | N.D. | 0.2 |
| 812-3364 | TPH | | 418.1 | mg/L | N.D. | 0.2 |

N.D. = None detected.

mg/L = Milligram/Litre (ppm)

mg/Kg = Milligram/Kilogram (ppm)

mcg/L = Microgram/Litre (ppb)

mcg/Kg = Microgram/Kilogram (ppb)

California State Department of Health Services
 Southern California Laboratory - SWQIS Lab ID No. 5091
 Volatile Organic Chemicals

LAB SAMPLE ID NO.: 812-3361

DATE REPORTED : 12/27/88

METHOD USED : EPA M 524.2 [] 624
 All reporting units = Mcg/l(ppb)
 N.D. = None detected

page 1 of 2

| CONSTITUENT | STORET CODE | ANALYSIS RESULTS | DETECTION LIMIT |
|-----------------------------|-------------|------------------|-----------------|
| Acrolein | 34210 | <u>ND</u> | 10.0 |
| Acrylonitrile | 34215 | | 5.0 |
| Benzene | 34030 | | 0.2 |
| Bromodichloromethane | 32101 | | 0.5 |
| Bromoform | 32104 | | 0.5 |
| Bromomethane | 34413 | | 0.5 |
| Carbon tetrachloride | 32102 | | 0.5 |
| Chlorobenzene | 34301 | | 0.5 |
| Chloroethane | 34311 | | 0.5 |
| 2-Chloroethylvinyl ether | 34576 | | 1.0 |
| Chloroform | 32106 | | 0.5 |
| Chloromethane | 34418 | | 0.5 |
| Dibromochloromethane | 32105 | | 0.5 |
| 1,2-Dichlorobenzene | 34536 | | 0.5 |
| 1,3-Dichlorobenzene | 34566 | | 0.5 |
| 1,4-Dichlorobenzene | 34571 | | 0.5 |
| Dichlorodifluoromethane | 34668 | | 0.5 |
| 1,1-Dichloroethane | 34496 | | 0.5 |
| 1,2-Dichloroethane | 34531 | | 0.5 |
| 1,1-Dichloroethylene | 34501 | | 0.2 |
| cis-1,2-Dichloroethylene | 77093 | | 0.5 |
| trans-1,2-Dichloroethylene | 34546 | | 0.5 |
| 1,2-Dichloropropane | 34541 | | 0.5 |
| cis-1,3-Dichloropropylene | 34704 | | 0.5 |
| trans-1,3-Dichloropropylene | 34699 | | 0.5 |
| Ethyl benzene | 34371 | | 0.5 |
| Ethylene dibromide | 77651 | | 0.5 |
| Methylene chloride | 34423 | | 0.5 |
| Methyl Ethyl Ketone | 81595 | | 5.0 |
| Methyl Isobutyl Ketone | 81596 | | 5.0 |
| Styrene | 77128 | | 0.5 |
| 1,1,2,2-Tetrachloroethane | 34516 | | 0.5 |
| Tetrachloroethylene | 34475 | <u>60</u> | 0.5 |

Southern California Laboratory - SWQIS Lab ID No. 5091
Volatile Organic Chemicals

LAB SAMPLE ID NO.: 812-3361

DATE REPORTED : 12/27/88

METHOD USED : EPA [X] 524.2 [] 624
All reporting units = Mcg/l(ppb)
N.D. = None detected

page 2 of 2

California State Department Of Health Services
 Southern California Laboratory - SWQIS Lab ID No. 5091
 Volatile Organic Chemicals

LAB SAMPLE ID NO.: 8/2-3363

DATE REPORTED : 12/27/88

METHOD USED : EPA 524.2 624
 All reporting units = Mcg/l(ppb)
 N.D. = None detected

page 1 of 2

| CONSTITUENT | STORET CODE | ANALYSIS RESULTS | DETECTION LIMIT |
|-----------------------------|-------------|------------------|-----------------|
| Acrolein | 34210 | ND | 10.0 |
| Acrylonitrile | 34215 | | 5.0 |
| Benzene | 34030 | | 0.2 |
| Bromodichloromethane | 32101 | | 0.5 |
| Bromoform | 32104 | | 0.5 |
| Bromomethane | 34413 | | 0.5 |
| Carbon tetrachloride | 32102 | | 0.5 |
| Chlorobenzene | 34301 | | 0.5 |
| Chloroethane | 34311 | | 0.5 |
| 2-Chloroethylvinyl ether | 34576 | | 1.0 |
| Chloroform | 32106 | | 0.5 |
| Chloromethane | 34418 | | 0.5 |
| Dibromochloromethane | 32105 | | 0.5 |
| 1,2-Dichlorobenzene | 34536 | | 0.5 |
| 1,3-Dichlorobenzene | 34566 | | 0.5 |
| 1,4-Dichlorobenzene | 34571 | | 0.5 |
| Dichlorodifluoromethane | 34668 | | 0.5 |
| 1,1-Dichloroethane | 34496 | | 0.5 |
| 1,2-Dichloroethane | 34531 | | 0.5 |
| 1,1-Dichloroethylene | 34501 | | 0.2 |
| cis-1,2-Dichloroethylene | 77093 | | 0.5 |
| trans-1,2-Dichloroethylene | 34546 | | 0.5 |
| 1,2-Dichloropropane | 34541 | | 0.5 |
| cis-1,3-Dichloropropylene | 34704 | | 0.5 |
| trans-1,3-Dichloropropylene | 34699 | | 0.5 |
| Ethyl benzene | 34371 | | 0.5 |
| Ethylene dibromide | 77651 | | 0.5 |
| Methylene chloride | 34423 | | 0.5 |
| Methyl Ethyl Ketone | 81595 | | 5.0 |
| Methyl Isobutyl Ketone | 81596 | | 5.0 |
| Styrene | 77128 | | 0.5 |
| 1,1,2,2-Tetrachloroethane | 34516 | | 0.5 |
| Tetrachloroethylene | 34475 | 119 | 0.5 |

Southern California Laboratory - SWQIS Lab ID No. 5091
Volatile Organic Chemicals

LAB SAMPLE ID NO.: 812-3363

DATE REPORTED : 12/27/88

METHOD USED : EPA [] 524.2 [] 624
All reporting units = Mcg/l(ppb)
N.D. = None detected

page 2 of 2